The Use of Child Safety Seats In Nebraska

The Results of a Survey of Child Safety Seat Use Fall 2013

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Executive Summary

Children up to six years of age were observed for child restraint system use as they were riding as a passenger in a vehicle. Safety seat/booster seat use was observed in both front and rear seats. Estimates of the age of the children were based on the observer's judgment.

Observations occurred at the same sites and on the same weekend days and times as in previous years.

Among the 1,002 children observed in the sample during September and October 2013, 95.9% were in child safety seat/booster seats. This rate is identical to the rate from the prior year and similar to the rates for the last few years (95.1% in 2011; 91.5% in 2010; and 95.1% in 2009) and much higher than the rate observed when this series of surveys began in 1999 (56.2%).

Of those observed in safety seat/booster seats, 95.6% were in the rear seat of the vehicles observed and 4.4% were in the front seat. In the rural counties 94.3% were in the rear seat, 5.7% in the front seat and in the urban counties 96.2% were in the rear seat and 3.8% in the front seat.

Of all the children rural counties, 96.1% were in safety seat/booster seats; in urban counties, 95.8% were in safety seat/booster seats.

Of the small number of children <u>not in safety seat/booster seats</u>, 70.7% were in the rear seats and 29.3% were in the front seats. The percent of children <u>not in safety seat/booster seats</u> in rural counties riding in the front seat of vehicles was 33.3%, and in urban counties 27.6%.

Background

The survey described in this report was designed to provide an estimate of child safety seat/booster seat use in Nebraska.

Observations of child safety seat/booster seat use were conducted in the three urban counties identified in Nebraska's original 1998 annual safety belt survey and in four rural counties whose safety belt use ranked in the lower half of all counties surveyed in Nebraska's 1998 Safety Belt Survey. These were essentially the same sites observed in the annual Child Safety Seat Use reports from 1999 to 2010. Some sites were modified to capture more traveled intersections as traffic patterns changed.

Observations occurred for 40 minutes at 14 heavily trafficked intersections in the three urban counties, and twice each at two heavily traveled intersections in the four rural counties. The urban observations included five Douglas County sites, five Lancaster County sites, and four Sarpy County sites. The rural observations included two sites

in Adams, Gage, Jefferson and Phelps Counties, with observations occurring twice at each site.

The intersections were drawn from the intersections used in the state's original 1998 safety belt survey and were picked purposely from all sampled intersections to maximize the likelihood of child riders in the vehicles observed. Intersections close to shopping malls, for example, were selected over intersections in outlying areas.

To maximize the likelihood of child passengers, all observations were conducted on Saturdays, between the hours of 9:45 a.m. and 5:30 p.m., during September and October 2013. No observations were conducted on Interstate road segments.

Observations were conducted in the same manner as those in Nebraska's annual safety belt survey. Child safety seat/booster seat use was observed in both front and rear seats. Estimates of the age of the children were based on the observer's judgment. If a child was judged to be under age six and was buckled in a safety seat/booster seat in either the front or the rear seat, they were counted as a "safety seat user". If the child or children were not in either a child safety seat or a booster seat and were buckled into an adult shoulder belt system, they were counted as a "non-safety seat user".

No estimate could be made of the quality of the child safety seat/booster seats observed or how well they were installed or how well the child was secured in the seat.

Results

Of the total number of vehicles observed 30.2% were in rural counties and 69.8% in urban counties. More children were observed in urban counties (69.3%) than in the rural counties (30.7%).

During the observation period, 871 vehicles (cars and pick-ups) were observed carrying 1,002 children judged to be under age six, and therefore, required by Nebraska law to be secured in an appropriate child safety seat/booster seat.

Of the 1,002 children observed, 95.9% were observed in child safety seat/booster seats. Of those in safety seat/booster seats, 95.6% were in the rear seats of the vehicles observed and 4.4% were in the front seats.

Of the 4.1% of children who were <u>not in safety seat/booster seats</u>, 70.7% were traveling in the rear seats and 29.3% were traveling in the front seats.

Rural-Urban Differences

Seventy percent of all safety seat/booster seat observations were made in the three urban counties (Douglas, Lancaster, and Sarpy) and 30% were made in the four rural counties (Adams, Gage, Jefferson, and Phelps Counties).

Of children observed in urban counties, 95.8% were in child safety seat/booster seats. Of the urban children in child safety seat/booster seats, 96.2% were in the rear seats and 3.8% were in the front seats.

Of the children observed in the four rural counties, 96.1% were in child safety seat/booster seats, 94.3% in the rear seats and 5.7% were in the front seats of the vehicles observed.

Of the children <u>not in safety seat/booster seats</u> in the urban counties, 72.4% were in the rear seats and 27.6% were in the front seats. In the rural counties, of the children <u>not in safety seat/booster seats</u>, 66.7% were in the rear seats and 33.3% were in the front seats.

In total, 29.3% of the children <u>not in child safety seat/booster seats</u> were riding in the front seats of their vehicles.

Conclusion

The rate of child safety seat/booster seat use in Nebraska has essentially been stable for the last six years, around 94%. Given the relatively high rate of use and the margin of possible error in this survey, results are unlikely to increase much in the future. The challenge is to remind each new generation of parents of the need to correctly and consistently use child restraints and/or booster seats.

Part of that challenge is reducing the number of parents who use child restraint/booster seats in the front seats of vehicles. Between 2004 and 2006, the proportion of children riding in safety seat/booster seats in the front seat of vehicles increased from 4.3% in 2004 to 8.1% in 2006. In 2007 this troublesome trend reversed. In 2013, 4.4% of the children in child restraint/booster seats were in the front seats, a slight increase from the 2012 rate of 3.2%.

For the 4.1% of children who were most at risk by <u>not</u> being in a safety seat/booster seat, 29.3% were in the front seats of their vehicle, an increase from the past two years (18.6% in 2012 and 11.5% in 2011). These numbers are small and therefore unstable but they suggest a continuing challenge.

If these overall rates can be maintained, the corresponding challenge continues to be to ensure that the restraints/booster seats are installed and used correctly.

<u>Year</u>	Percentage Restrained in Child Safety/ Booster Seats	Percentage Restrained in Rear Child Safety/ <u>Booster Seats</u>	Percentage Restrained in <u>Urban Counties</u>	Percentage Restrained in Rural Counties
1999	56.2	92.5	55.7	57.3
2000	66.4	95.5	66.7	65.4
2001	67.4	96.6	68.1	64.8
2002	69.6	95.0	69.3	70.4
2003	86.2	93.6	88.5	81.5
2004	87.7	95.7	85.9	91.3
2005	84.3	94.0	87.0	78.7
2006	88.6	91.9	87.8	90.0
2007	93.2	97.0	92.7	94.0
2008	96.8	97.3	96.3	97.7
2009	95.1	96.6	95.4	94.5
2010	91.5	92.0	92.4	90.0
2011	95.1	97.1	96.0	93.0
2012	95.9	96.8	95.8	96.0
2013	95.9	95.6	95.8	96.1

Appendix AResults of Observations of 30 Intersections

		Total No. with Seats		Total No. w/o Seats			
	Total No.	Front	Rear		Front	Rear	
Intersection	Vehicles	Seat	Seat	Total	Seat	Seat	Total
1*	55	5	59	64	2	1	3
2*	39	1	38	39	0	2	2
3*	34	2	36	38	0	1	1
4*	36	3	37	40	1	1	2
5*	54	4	53	57	1	0	1
6*	40	1	44	45	1	0	1
7*	54	0	57	57	0	1	1
8*	34	1	33	34	1	2	3
9*	27	0	29	29	0	0	0
10*	36	1	35	36	0	4	4
11*	44	1	51	52	0	1	1
12*	68	1	75	76	1	3	4
13*	39	1	40	41	0	3	3
14*	48	4	53	57	1	2	3
15	5	0	6	6	0	0	0
16	7	1	5	6	0	2	2
17	11	1	11	12	0	0	0
18	13	1	14	15	0	1	1
19	28	3	27	30	0	2	2
20	24	1	25	26	1	0	1
21	36	1	42	43	1	0	1
22	34	1	36	37	0	0	0
23	6	1	6	7	0	0	0
24	7	0	8	8	0	1	1
25	7	1	8	9	0	0	0
26	5	1	4	5	1	0	1
27	17	1	19	20	0	1	1
28	22	1	25	26	0	0	0
29	20	3	19	22	0	1	1
30	21	0	24	24	1	0	1
Totals	871	42	919	961	12	29	41
	Total Children Observed						1,002

^{*}Urban Counties